BTEC Assignment Brief

Qualification	Pearson BTEC International Level 3 Subsidiary Diploma in Land-based Studies Pearson BTEC International Level 3 Foundation Diploma in Agriculture Pearson BTEC International Level 3 Diploma in Agriculture Pearson BTEC International Level 3 Extended Diploma in Agriculture
Unit number and title	Unit 18: Crop Handling, Storage and Quality Assurance
Learning aim(s)	**A** Investigate processes and systems to maintain dry crop products in storage **B** Investigate processes and systems to maintain fresh crop products in storage
Assignment title	**Safe storage**
Assessor	
Issue date	
Hand in deadline	

Vocational Scenario or Context	Once a crop has been successfully harvested, it is important to ensure that the crop is maintained in a safe and saleable condition until it is transferred to the end-user or retailer. Following last year's local food and farming awards, the college has been approached by procurement managers from a pet shop chain, a major retailer, and from local food manufacturers/processors, who have asked for professional updating regarding farm storage methods, ranging from combinable crops stored dry throughout the year, to fruit and vegetables stored fresh for a short period.
Task 1	You will be concentrating on the storage of dry products. This task will be supported by a visit to the Local Grain Cooperative central store and the college's corn store. To achieve this Learning Aim, you will need to provide a report containing a general introduction to storing dry crop products, and a review of the storage and quality requirements for the two contrasting dry crop products listed below: • a pulse or oilseed crop of your choice in long term storage, intended for human consumption • a cereal crop of your choice in temporary storage, for processing into animal feed on-farm. Ensure that the fundamental requirements of moisture, temperature, air flow and prevention of pest infestation are reviewed. You need to produce: • a written technical report, including illustrations,

	summarising your research reviewing the storage systems and crop management at the central store and the college farm, with particular emphasis on end user specifications and maintaining crop quality • a poster or presentation detailing the relevant food safety, legislation/codes of practice and health and safety requirements associated with crop storage.
Checklist of evidence required	• A technical report reviewing the storage of two contrasting combinable crops. • Poster or presentation using software e.g. PowerPoint.

Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria you must show that you are able to:
A.D1	Evaluate the suitability of storage systems for two contrasting dry crop products, relating it to the maintenance of quality.
A.M1	Assess the suitability of storage systems for two contrasting dry crop products.
A.P1	Explain the basic physical storage requirements for two contrasting dry crop products.
A.P2	Explain the key aspects involved in the management of dry crop products in storage.

Task 2	For Task 1, crops which are stored dry were investigated, and now, for Task 2, crops which are stored with higher moisture contents are considered. Your report must provide a general introduction to storing fresh crop products, and then review the storage and quality requirements for two contrasting crop: • a root crop, vegetable or fruit product • silage, haylage or hay. This task will be supported by a visit to the Local produce cool store vegetable packhouse, which contains grading lines. You will also need to visit the college silage clamps, forage beet clamp and hay shed. Ensure that you review the fundamental requirements of temperature control, pest and disease infestation, timeliness, and the management of waste/effluent (and in the case of silage, pH). You must produce: • a written and illustrated, technical report summarising your research reviewing the storage systems and crop management of a root crop, vegetable or fruit product, and a forage crop, with particular emphasis on end user specifications and maintaining crop quality • a booklet detailing the relevant food safety, legislation/codes of practice and health and safety requirements associated with the storage of fresh crop products.
Checklist of evidence required	• A technical report reviewing the storage of a root crop, vegetable or fruit product, and a forage crop.

	• Poster or presentation using software, e.g. PowerPoint.
Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria you must show that you are able to:
B.D2	Evaluate the suitability of storage systems for two contrasting fresh crops, relating it to the maintenance of crop product quality.
B.M2	Assess the suitability of storage systems for two contrasting fresh crop products.
B.P3	Explain the basic physical storage requirements for two contrasting fresh crop products.
B.P4	Explain the key aspects involved in the management of fresh crop products in storage.
Sources of information to support you with this Assignment	**Books** Bell, B. 2016, *Farm Machinery* 6th Edition, Old Pond Publishing, ISBN 9781910456064 **Journal** Farmers Weekly **Website** camgrain.co.uk
Other assessment materials attached to this Assignment Brief	Risk assessments: appropriate PPE is indicated on the risk assessments for the visits.